PATENT COOPERATION TREATY

INTERNATIONAL SEARCHI	ING AUTHORE	ΓY			
To: LINDA E. HALL GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY, UW2220 709 SWEDELAND ROAD, P.O. BOX 1539 KING OF PRUSSIA, PA 19406-0939		PCT REC'D 0 8 DEC 2005 WRITTEN OPINION OF THE POT INTERNATIONAL SEARWING AUTHORITY			
			(PCT Rule 43 <i>bis</i> .1)		
			Date of mailing		
Applicant's or agent's file refe	arence		(day/month/year FOR FURTHE	2 0 5 DEC 2005	
PU60698				See paragraph 2 below	
International application No. International filing date			(day/month/year)	Priority date (day/month/year)	
PCT/US05/02121	21 1	January 2005 (21.01.	2005)	23 January 2004 (23.01.2004)	
International Patent Classificat		n national classificat	ion and IPC		
IPC(7): C07D 401/00 and US Applicant	CI.: 540/597				
SMITHKLINE BEECHAM C	ORPORATION				
	· .				
1. This opinion contains indi	cations relating (to the following item	s:		
Box No. I Basis of the opinion					
Box No. II Priority					
Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
, []	ack of unity of i				
Box No. V R	leasoned stateme	ent under Rule 43 <i>bis</i> . tions and explanation	1(a)(i) with regard	to novelty, inventive step or industrial	
	Certain document				
Box No. VII C	ertain defects in	the international app	dication		
——————————————————————————————————————		ons on the internation		,	
			·	·	
differentiational Freiningsry	examining Aut one to be the IPI	hoπty ("IPEA") exc BA and the chosen I	cept that this does	be considered to be a written opinion of the not apply where the applicant chooses an he International Bureau under Rule 66.1bis(b) lered.	
If this opinion is, as provided in the PEA a written reply togeth of Form PCT/ISA/220 or b. For further options, see For	efore the expirat	ion of 22 months from	nents before the ev	PEA, the applicant is invited to submit to the contract of 3 months from the date of mailing whichever expires later.	
3. For further details, see note	s to Form PCT/[SA/220.			
Name and mailing address of th	e ISA/ US	Date of completi	on of this opinion	Authorized officer	
Mail Stop PCT, Attn: ISA Commissioner for Patents	a/us	14 November 20	•	Brenda L. Colcapina	
P.O. Box 1450 Alexandria, Virginia 223		14 Movember 20	· (14.11.2003)	Chor.	
Facsimile No. (571) 273-3201				Telephone No. 571-272-1600	

Form PCT/ISA/237 (cover sheet) (April 2005)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US05/02121

Box N	o. I Basis of this opinion			
1. With	regard to the language, this opinion has been e		•	
	the international application in the langu	-	•	•
لـا	a translation of the international application is international search (Rules 12.3(a) and 23.1(t		language of a translation furn	ished for the purposes of
	regard to any nucleotide and/or amino acid s tion, this opinion has been established on the b		he international application an	d necessary to the claimed
B.	type of material			
	a sequence listing		•	·
	table(s) related to the sequence listing			•
٠	6	٠		•
ъ.	format of material			•
	on paper			
	in electronic form			
c.	time of filing/furnishing			•
	contained in the international applicati	ion as filed.		•
			£	
	filed together with the international ap	pheation in electronic	IOHIL	
•	furnished subsequently to this Authorit	ty for the purposes of s	earch.	
	•			
3. 🔝	In addition, in the case that more than one ve	rsion or copy of a sequ	ence listing and/or table(s) rel	ating thereto has been filed
	or furnished, the required statements that the application as filed or does not go beyond the	e information in the s e application as filed, a	ubsequent or additional copie s appropriate, were furnished.	s is identical to that in the
A	ional comments:	••		
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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US05/02121

Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1. Statement		•	
Novelty (N)	Claims 1-43	YES	
	Claims 44		
Inventive step (IS)	Claims 1-43	YES	
inventive step (15)	Claims 44		
Industrial applicability (IA)	Claims 1-44	YES	
mustrial applications (23)	Claims NONE	NO	
	<u> </u>		
2. Citations and explanations:		•	

Claim 44 lacks novelty under PCT Article 33(2) as being anticipated by WO 2001/070232 A1 (SMITHKLINE BEECHAM CORPORATION). WO 2001/070232 teaches the benzofuran-2-carboxylic acid {(S)-1-[(3S,4S,7R)-3-hydroxy-7-methyl-1-1(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-3-methyl-butyl}-amide compound of the instant invention. See lines 1-2 on page 57.

Claim 44 lacks an inventive step under PCT Article 33(3) as being obvious over WO 2001/070232 A1 (SMITHKLINE BEECHAM CORPORATION). For reasons stated above.

Claims 1-43 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the process of preparing the compounds of formulae I and II and the intermediates as claimed herein.

Claims 1-43 meet the criteria set out in PCT Article 33(4), and thus the process of preparing the compounds of formulae I and II and the intermediates have industrial applicability because the subject matter claimed can be made or used in industry.

Form PCT/ISA/237 (Box No. V) (April 2005)

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORN		MATION IN	CAIY	
To: LINDA E. HALL GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY, UW2220 709 SWEDELAND ROAD, P.O. BOX 1539 KING OF PRUSSIA, PA 19406-0939		PCT REC'D 0 8 DEC 2005 WRITTEN OPINION OF THE PCT INTERNATIONAL SEARWING AUTHORITY		
			(PCT Rule 43bis. 1)	
		Date of mailing (day/month/year	0.5 DEC 2005	
Applicant's or agent's file reference PU60698		FOR FURTHE	R ACTION See paragraph 2 below	
International application No. Inte	rnational filing date	(day/month/year)	Priority date (day/month/year)	
	anuary 2005 (21.01.			
International Patent Classification (IPC) or both	h national classificat	ion and IPC.	23 January 2004 (23.01.2004)	
IPC(7): C07D 401/00 and US Cl.: 540/597				
Applicant				
SMITHKLINE BEECHAM CORPORATION		(
This opinion contains indications relating t	o the following its			
Box No. I Basis of the opini	-	·.		
Box No. II Priority				
Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability				
Box No. IV Lack of unity of invention				
Box No. V Reasoned stateme	Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
Box No. VI Certain documents				
Box No. VII Certain defects in	the international app	lication		
Box No. VIII Certain observation	ns on the internation	al application		
2. FURTHER ACTION		•		
atternational richimitary examining Ann	nority ("IPEA") exc SA and the chosen T	ept that this does	be considered to be a written opinion of the not apply where the applicant chooses an he International Bureau under Rule 66.1bis(b) lered.	
If this opinion is, as provided above, consi IPEA a written reply together, where appro of Form PCT/ISA/220 or before the expirati For further options, see Form PCT/ISA/220.	on of 22 months from	IPNIG BATATA the av	PEA, the applicant is invited to submit to the piration of 3 months from the date of mailing whichever expires later.	
3. For further details, see notes to Form PCT/IS	SA/220.			
Name and mailing address of the ISA/ US	Date of complete	on of this opinion	Authorized officer	
Mail Stop PCT, Attn: ISA/US Commissioner for Patents	1	-	(\la (/1X Backal)	
P.O. Box 1450 Alexandria, Virginia 22313-1450	14 November 20	və (14.11.2005)	Brenda L. Colcaffen	
Facsimile No. (571) 273-3201			Telephone No. 571-272-1600	

Form PCT/ISA/237 (cover sheet) (April 2005)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US05/02121

Box No	o. I Basis of this opinion					
1. With 1	egard to the language, this o	pinion has been estab	olished on the basis of	:	•	
\boxtimes	the international applicat	ion in the language	in which it was file	d		
	a translation of the international search (Rules		, which is the la	nguage of a trans	slation furnished for t	the purposes of
2. With	regard to any nucleotide and tion, this opinion has been es	Vor amino acid sequ tablished on the basis	ence disclosed in the of:	international app	olication and necessa	ry to the claimed
8.	type of material			•		
	a sequence listing					
	table(s) related to the	sequence listing	,			· ·
ъ.	format of material			•	-	
•	on paper	•				
	in electronic form					
c.	time of filing/furníshing		•			
o.	contained in the inter	rnational application s	as filed.			
			ation in electronic for			
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	iumshed subsequent	ly to this Authority fo	r the purposes of sear	ch.		
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3	In addition, in the case that or furnished, the required	statements that the in	formation in the subs	sequent or additi	onal copies is identi-	
	application as filed or docs	not go beyond the ap	plication as filed, as a	ppropriate, were	rumisned.	
4. Addit	onal comments:					
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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US05/02121

1. Statement	· · · · · · · · · · · · · · · · · · ·	
Novelty (N)	Claims 1-43	YES
	Claims 44	NO
Inventive step (IS)	Claims 1-43	YES
	Claims 44	NO
Industrial applicability (IA)	Claims 1-44	YES
	Claims NONE	N0

2. Citations and explanations:

Claim 44 lacks novelty under PCT Article 33(2) as being anticipated by WO 2001/070232 A1 (SMITHKLINE BEECHAM CORPORATION). WO 2001/070232 teaches the benzofuran-2-carboxylic acid {(S)-1-[(3S,4S,7R)-3-hydroxy-7-methyl-1-1(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-3-methyl-butyl}-amide compound of the instant invention. See lines 1-2 on page 57.

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